

Holding Time 7 Days to Extract
Instrument GC/ECD
Recommended Container 1 Liter Amber B.R.
Units ug/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Aroclor 1016	12674-11-2	0.01	0.00201		
Aroclor 1221	11104-28-2	0.01	0.005		
Aroclor 1232	11141-16-5	0.01	0.00238		
Aroclor 1242	53469-21-9	0.01	0.0033		
Aroclor 1248	12672-29-6	0.01	0.00156		
Aroclor 1254	11097-69-1	0.01	0.00201		
Aroclor 1260	11096-82-5	0.01	0.0011		

Item No. 0004AB & 0006AB
Method Name PCB's by GC (Soil or Sediment)
Method Number SW8082
Extraction Method SW3550
Level Standard
Matrix Solid
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GC/ECD
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Aroclor 1016	12674-11-2	0.1	0.011		
Aroclor 1221	11104-28-2	0.1	0.0471		
Aroclor 1232	11141-16-5	0.1	0.0376		
Aroclor 1242	53469-21-9	0.1	0.0201		
Aroclor 1248	12672-29-6	0.1	0.05		
Aroclor 1254	11097-69-1	0.1	0.0156		
Aroclor 1260	11096-82-5	0.1	0.0156		

Item No. 0007AA & 0007AB * This is an extraction method & does not have detection limits associated with it.

Extraction Method TCLP/SPLP Zero Head Space Extraction EPA 1311/1312

Item No. 0008AA
Method Name Metals by ICP (Water) - Standard
Method Number E200.7
Extraction SW3005

Method
Level **Standard**
Matrix **Water**
Preservative **HNO₃ - pH<2**
Holding Time **6 Months**
Instrument **ICP - PE OPTIMA 3200DV**
Recommended
Container **250 ml HDPE**
Units **mg/L**
Method Name **Metals by ICP-MS (water)**
Method Number **SW6010**
Extraction
Method **SW3005**
Level **Low**
Matrix **water**
Preservative **HNO₃ - pH<2, Cool 4 C**
Holding Time **6 Months**
Instrument **ICPMS**
Recommended
Container **250 ml HDPE**
Units **mg/kg**

Parameter	CAS #	PQL	MDL	PQL	MDL
Aluminum	742-99-05	0.1	0.01036		
Antimony	7440-36-0	0.05	0.003195		
Arsenic	7440-38-2	0.01	0.003919		
Barium	7440-39-3	0.005	0.00106		
Beryllium	7440-41-7	0.002	0.000809		
Boron	7440-42-8	0.2	0.040269		
Cadmium	7440-43-9	0.005	0.001444		
Calcium	7440-70-2	1	0.006141		
Chromium	7440-47-3	0.01	0.008349		
Cobalt	7440-48-4	0.005	0.001357		
Copper	7440-50-8	0.01	0.003923		
Iron	7439-89-6	0.1	0.020245		
Lead	7439-92-1	0.01	0.005395		
Magnesium	7439-95-4	1	0.009973		
Potassium	7440-09-7	1	0.048669		
Silver	7440-22-4	0.01	0.001999		
Sodium	7440-23-5	1	0.725311		
Vanadium	7440-62-2	0.01	0.002743		
Zinc	7440-66-6	0.01	0.006299		

Item No. **0008AB**
Method Name **Metals by ICP-MS (Soil or Sediment)**
Method Number **SW6010**
Extraction
Method **SW3005**

Level Low
Matrix Solid
Preservative Cool 4 C
Holding Time 6 Months
Instrument ICPMS
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Aluminum	742-99-05	5	2.5		
Antimony	7440-36-0	5	2.5		
Barium	7440-39-3	5	2.5		
Beryllium	7440-41-7	5	2.5		
Cadmium	7440-43-9	1	0.3		
Calcium	7440-70-2	5	2.5		
Chromium	7440-47-3	1	0.3		
Cobalt	7440-48-4	5	2.5		
Copper	7440-50-8	15	15		
Iron	7439-89-6	5	2.5		
Lead	7439-92-1	1	0.5		
Magnesium	7439-96-5	5	2.5		
Manganese	7439-96-5	5	2.5		
Nickel	7440-02-0	5	2.5		
Potassium	7440-09-7	5	2.5		
Silver	7440-22-4	1	0.2		
Sodium	7440-23-5	5	2.5		
Vanadium	7440-62-2	5	2.5		
Zinc	7440-66-6	30	15.0		

Item No. 0009AA & 0010AA
Method Name Metals by ICP-MS (Water) - Low
Method Number AA/SW6020
Extraction Method SW3005
Level Low
Matrix Water
Preservative HNO₃ - pH<2
Holding Time 6 Months
Instrument ICPMS
Recommended Container 250 ml HDPE
Units mg/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Aluminum	742-99-05	0.01	0.002		
Antimony	7440-36-0	0.003	0.0000224		
Arsenic	7440-38-2	0.001	0.0001086		
Barium	7440-39-3	0.001	0.0000054		

Beryllium	7440-41-7	0.0005	0.0000142		
Cadmium	7440-43-9	0.0005	0.0000071		
Calcium	7440-70-2	0.001	0.0000144		
Chromium	7440-47-3	0.001	0.0000354		
Cobalt	7440-48-4	0.0005	0.0000039		
Copper	7440-50-8	0.001	0.0000144		
Iron	7439-89-6	0.001	0.0000144		
Lead	7439-92-1	0.0005	0.0000045		
Magnesium	7439-96-5	0.001	0.0000144		
Manganese	7439-96-5	0.0005	0.0000084		
Nickel	7440-02-0	0.001	0.0000283		
Potassium	7440-09-7	0.001	0.0000144		
Selenium	7782-49-2	0.003	0.0003846		
Silver	7440-22-4	0.0005	0.000006		
Sodium	7440-23-5	0.001	0.0000144		
Thallium	7440-30-4	0.0005	0.0000056		
Vanadium	7440-62-2	0.001	0.000076		
Zinc	7440-66-6	0.003	0.0000327		

Item No. 0009AB & 0010AB
Method Name Metals by ICP-MS (Soil or Sediment)
Method Number AA/SW6020
Extraction Method SW3005
Level Low
Matrix Solid
Preservative Cool 4 C
Holding Time 6 Months
Instrument ICPMS
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Aluminum	742-99-05	10	2		
Antimony	7440-36-0	3	0.0224		
Arsenic	7440-38-2	1	0.1086		
Barium	7440-39-3	1	0.0054		
Beryllium	7440-41-7	0.5	0.0142		
Cadmium	7440-43-9	0.5	0.0071		
Calcium	7440-70-2	0.5	0.0142		
Chromium	7440-47-3	1	0.0354		
Cobalt	7440-48-4	0.5	0.0039		
Copper	7440-50-8	1	0.0144		
Lead	7439-92-1	0.5	0.0045		
Magnesium	7439-96-5	0.5	0.0142		
Manganese	7439-96-5	0.5	0.0084		
Nickel	7440-02-0	1	0.0283		

Potassium	7440-09-7	0.5	0.0142		
Selenium	7782-49-2	3	0.3846		
Silver	7440-22-4	0.5	0.006		
Sodium	7440-23-5	0.5	0.0142		
Thallium	7440-30-4	0.5	0.0056		
Vanadium	7440-62-2	1	0.076		
Zinc	7440-66-6	3	0.0327		

Item No. 0011AA
Method Name Mercury by CVAA (Water)
Method Number E245.2, 7470, 7471
Extraction Method
Level Standard
Matrix Water
Preservative HNO₃ - pH<2
Holding Time 6 Months
Instrument CVAA
Recommended Container 250 ml HDPE
Units mg/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Mercury	7439-97-6	0.0002	0.0000171		

Item No. 00011AB
Method Name Mercury by CVAA in Solids (Soil or Sediment)
Method Number SW7471
Extraction Method SW7471
Level Standard
Matrix Solid
Preservative Cool 4 C
Holding Time 28 Days
Instrument CVAA
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Mercury	7439-97-6	0.02	0.0131		

Item No. 0012AA
Method Name CYANIDE (water)
Method Number EPA 335.3
Extraction Method
Level Standard

Matrix Water
Preservative Cool 4 C
Holding Time 14 Days
Instrument
Recommended Container 1 liter HDPE
Units mg/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Cyanide, total	57-12-5	0.05	0.05		

Item No. 0012AB
Method Name CYANIDE (sediment or soil)
Method Number EPA 9010 or 9012
Extraction Method
Level Standard
Matrix Soil
Preservative Cool 4 C
Holding Time 14 Days
Instrument
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Cyanide, total		0.1	0.1		

Item No. 0013AA
Method Name Total Organic Carbon (TOC) (Water) - Standard
Method Number E415.1
Extraction Method
Level Standard
Matrix Water
Preservative H2SO4 - pH<2
Holding Time 28 Days
Instrument
Recommended Container 125 ml HDPE
Units mg/L

Parameter	CAS #	PQL	MDL	PQL	MDL
TOC (total organic carbon)	E-10195	0.5	0.35		

Item No. 0013AB
Method Name Total Organic Carbon (TOC) (Sediment or Soil)
Method Number SW 9060
Extraction Method
Level Standard
Matrix Solid
Preservative Cool 4 C
Holding Time 28 Days
Instrument
Recommended Container 4 oz. Soil Jar
Units mg/Kg

Parameter	CAS #	PQL	MDL	MRL
TOC (total organic carbon)	E-10195	100	39.9	

Item No. 0015
Method Name Organotin
Method Number Krone – Pore Water (interstitial)
Extraction Method Krone
Level
Matrix Sediment Pore Water
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GCMS - Ion Trap
Recommended Container 1 liter
Units ug/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Tetrabutyltin		0.003	0.00113		
Tributyltin		0.004	0.00138		
Dibutyltin		0.003	0.0011		
Monobutyltin		0.003	0.00078		

Item No. 0016
Method Name Organotins by GC/MS Ion Trap Full Scan (PSEP) Protocol
Method Number Krone – Total Bulk
Extraction Method Krone
Level Standard
Matrix Sediment/Soil
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GCMS - Ion Trap
Recommended 4 oz. Soil Jar

Container**Units** **ug/Kg**

Parameter	CAS #	PQL	MDL	PQL	MDL
Tetrabutyltin	688-73-3	2	0.751		
Tributyltin	688-73-3	2.67	0.923		
Dibutyltin	688-73-3	2	0.731		
Monobutyltin	688-73-3	1.33	0.521		

Item No. 0017AA
Method Name Dioxin/furan
Method Number SW8290
Extraction
Method SW3510
Level Low Volume
Matrix Water
Preservative Cool 4 C
Holding Time 7 Days to Extract
Instrument GCMS - Ion Trap
Recommended
Container 125 ml Amber B.R.

Units **Ppq (part per quadrillion)**

Parameter	PQL	MDL	PQL	MDL
2,3,7,8 - TCDD	10.0	1.3		
Total TCDD	10.0	1.3		
1,2,3,7,8 - PeCDD	15.0	2.0		
Total PeCDD	20.0	5.5		
1,2,3,4,7,8 - HxCDD	12.0	1.7		
1,2,3,6,7,8 - HxCDD	12.0	1.6		
1,2,3,6,7,9 - HxCDD	11.0	1.5		
Total (other) HxCDD	12.0	1.7		
1,2,3,4,6,7,8-HpCDD	29.0	3.9		
Total (other) HpCDD	50.0	4.2		
OCDD	30.0	2.8		
2,3,7,8-TCDF	8.0	1.1		
1,2,3,7,8 - PeCDF	8.0	1.1		
1,3,4,7,8 - PeCDF	8.0	1.1		
Total (other) PeCDF	8.0	1.1		
1,2,3,4,7,8 - HxCDF	9.0	1.2		
1,2,3,6,7,8 - HxCDF	7.5	1.0		
2,3,4,6,7,8 - HxCDF	10.0	1.3		
2,3,6,7,8,9 - HxCDF	10.0	1.3		
Total (other) HxCDF	10.0	1.3		
1,2,3,4,6,7,8 - HpCDF	11.0	1.5		
1,2,3,4,7,8,9 - HpCDF	8.0	1.1		
Total (other) HpCDF	11.0	1.5		
OCDF	17.0	2.2		
1,2,3,7,8 - PeCDF	8.0	1.1		

Item No. 0017AB
Method Name Dioin/furan
Method Number SW8290
Extraction Method SW3510
Level Low Volume
Matrix Sediment
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GCMS - Ion Trap
Recommended Container 8oz. Soil Jar
Units Pg/g

Parameter	PQL	MDL	PQL	MDL
2,3,7,8 - TCDD	1.0	0.13		
Total TCDD	1.0	0.13		
1,2,3,7,8 - PeCDD	1.5	0.20		
Total PeCDD	2.0	0.55		
1,2,3,4,7,8 - HxCDD	1.2	0.17		
1,2,3,6,7,8 - HxCDD	1.15	0.16		
1,2,3,6,7,9 - HxCDD	1.1	0.15		
Total (other)HxCDD	1.2	0.17		
1,2,3,4,6,7,8-HpCDD	2.9	0.39		
Total (other) HpCDD	3.0	0.42		
OCDD	5.0	2.8		
2,3,7,8-TCDF	0.80	0.11		
1,2,3,7,8 - PeCDF	0.80	0.11		
1,3,4,7,8 - PeCDF	0.80	0.11		
Total (other) PeCDF	0.80	0.11		
1,2,3,4,7,8 - HxCDF	0.90	0.12		
1,2,3,6,7,8 - HxCDF	0.75	0.10		
2,3,4,6,7,8 - HxCDF	1.0	0.13		
2,3,6,7,8,9 - HxCDF	1.0	0.13		
Total (other) HxCDF	1.0	0.13		
1,2,3,4,6,7,8 - HpCDF	1.1	0.15		
1,2,3,4,7,8,9 - HpCDF	0.80	0.11		
Total (other) HpCDF	1.1	0.15		
OCDF	1.7	0.22		
1,2,3,7,8 - PeCDF	0.80	0.11		

Item No. 0018
Method Name Physical
 Soil Classification - ASTM D2487
Method Number Particle Size - ASTM D422
 Hydrometer - ASTM D422
 Particle Shape- ASTM 2488

Void Ratio- ASTM D653

Calculated Resuspended Density = $\frac{\text{Wet wt.} \times 100}{(\text{Vs}) + (\text{V H}_2\text{O})}$

Volatile Solids- ASTM D2216, D4643, D653

Detection Limits N/A

Item No. 0019
Method Name Moisture Content
Method Number ASTMD2216
Detection Limits N/A

Item No. 0020AA
Method Name Chlorinated Herbicides by GC-MS (Water)
Method Number SW8151
Extraction Method SW3510
Level Low Volume
Matrix Water
Preservative Cool 4 C
Holding Time 7 Days to Extract
Instrument GCMS - Ion Trap
Recommended Container 125 ml Amber B.R.
Units ug/L

Parameter	CAS #	PQL	MDL	PQL	MDL
2,4,5-T	93-76-5	0.16	0.0577		
2,4-D	94-75-7	0.08	0.0296		
2,4-DB	94-82-6	0.16	0.0577		
4-Nitrophenol	100-02-7	0.08	0.0114		
Dalapon	75-99-0	0.08	0.0124		
Dicamba	1918-00-9	0.08	0.0221		
Dichloroprop	126-36-5	0.08	0.0114		
Dinoseb	88-85-7	0.08	0.0292		
MCPA	94-74-6	0.08	0.0134		
MCP	93-65-2	0.08	0.0114		
Pentachlorophenol	87-86-5	0.08	0.0259		
Silvex (2,4,5-TP)	93-72-1	0.08	0.0227		

Item No. 0020AB
Method Name Chlorinated Herbicides by GC-MS (Soil or Sediment)
Method Number SW8151
Extraction Method SW3550
Level Standard
Matrix Solid
Preservative Cool 4 C

Holding Time **14 Days to Extract**
Instrument **GCMS - Ion Trap**
Recommended
Container **4 oz. Soil Jar**
Units **ug/kg**

Parameter	CAS #	PQL	MDL	PQL	MDL
2,4,5-T	93-76-5	6.67	1.45		
2,4-D	94-75-7	6.67	0.55		
2,4-DB	94-82-6	6.67	0.935		
4-Nitrophenol	100-02-7	6.67	1.47		
Clopyralid	1702-17-6	6.67	1.87		
Dalapon	75-99-0	6.67	2.03		
Dicamba	1918-00-9	6.67	1.62		
Dichloroprop	126-36-5	6.67	0.71		
Dinoseb	88-85-7	6.67	0.55		
MCPA	94-74-6	6.67	1		
MCP	93-65-2	6.67	1.82		
Pentachlorophenol	87-86-5	6.67	0.778		
Silvex (2,4,5-TP)	93-72-1	6.67	2.13		

Item No. **0021AA**
Method Name **Organophosphorus Pesticides by GC-MS (Water)**
Method Number **SW8141**
Extraction
Method **SW3510**
Level **Standard**
Matrix **Water**
Preservative **Cool 4 C**
Holding Time **7 Days to Extract**
Instrument **GCMS - Ion Trap**
Recommended
Container **1 Liter Amber B.R.**
Units **ug/L**

Parameter	CAS #	PQL	MDL	PQL	MDL
Azinphos,methyl	86-50-0	0.15	0.044		
Bolstar	35400-43-2	0.1	0.0311		
Chlorpyrifos	2921-88-2	0.15	0.0582		
Coumaphos	56-72-4	0.15	0.0852		
Demeton,o-s	8065-48-3	0.2	0.0701		
Diazinon	333-41-5	0.2	0.0616		
Dichlorvos	62-73-7	0.2	0.0785		
Dimethoate	60-51-5	0.5	0.17		
Disulfoton	298-04-4	0.15	0.0496		
EPN	2104-64-5	0.1	0.037		
Ethoprop	13194-48-4	0.3	0.108		
Fensulfothion	115-90-2	0.15	0.0496		
Fenthion	55-38-9	0.1	0.0311		

Malathion	121-75-5	0.2	0.0868		
Merphos	150-50-5	0.15	0.0693		
Mevinphos	7786-34-7	0.2	0.0592		
Monocrotophos	6923-22-4	0.1	0.0277		
Naled	300-76-5	0.2	0.0741		
Parathion	56-38-2	0.15	0.044		
Parathion, methyl	298-00-0	0.3	0.153		
Phorate	298-02-2	0.15	0.0527		
Ronnel	299-84-3	0.2	0.0854		
Sulfotepp	3689-24-5	0.1	0.037		
Tetrachlorvinphos	961-11-5	0.1	0.0311		
Tokuthion	34643-46-4	0.15	0.0543		
Trichloronate	327-98-0	0.1	0.0354		

Item No. 0021AB
Method Name Organophosphorus Pesticides by GC-MS (Soil or Sediment)
Method Number SW8141
Extraction Method SW3550
Level Standard
Matrix Solid
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GCMS - Ion Trap
Recommended Container 4 oz. Soil Jar
Units ug/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
Azinphos,methyl	86-50-0	6.67	2.55		
Bolstar	35400-43-2	6.67	2.33		
Chlorpyrifos	2921-88-2	10	2.71		
Coumaphos	56-72-4	10	4.62		
Demeton,O-S	8065-48-3	6.67	1.83		
Diazinon	333-41-5	20	8.2		
Dichlorvos	62-73-7	6.67	2.13		
Dimethoate	60-51-5	13.3	3.93		
Disulfoton	298-04-4	13.3	5.09		
EPN	2104-64-5	10	3.86		
Ethoprop	13194-48-4	10	4.02		
Fensulfotion	115-90-2	10	3.19		
Fenthion	55-38-9	10	3.66		
Malathion	121-75-5	10	3.84		
Merphos	150-50-5	20	7.89		
Mevinphos	7786-34-7	6.67	2.5		
Monocrotophos	6923-22-4	6.67	1.47		
Naled	300-76-5	20	6.87		
Parathion	56-38-2	6.67	2.29		

Parathion, methyl	298-00-0	10	2.64		
Phorate	298-02-2	10	2.66		
Ronnel	299-84-3	6.67	2.44		
Sulfotepp	3689-24-5	6.67	1.83		
Tetrachlorvinphos	961-11-5	6.67	1.56		
Tokuthion	34643-46-4	10	2.77		
Trichloronate	327-98-0	10	2.88		

Item No. 0022
Method Name Elutriate Test
Method Number USACE Tech Report d-86-4
Detection Limits N/A (Extraction Method)

Item No. 0023
Method Name North West Diesel-Motor Oil Range Organics (Soil or Sediment)
Method Number NWTPH-Dx
Extraction Method SW3550
Level Standard
Matrix Solid
Preservative Cool 4 C
Holding Time 14 Days to Extract
Instrument GC/FID
Recommended Container 4 oz. Soil Jar
Units mg/kg

Parameter	CAS #	PQL	MDL	PQL	MDL
#2 Diesel	68334-30-5	0.25	0.125		
Motor Oil		0.5	0.25		
Bunker C		0.5	0.25		

Item No. 0024
Method Name Alkalinity
Method Number EPA 310.1
Detection Limits 20 mg/L

Item No. 0025
Method Name Biochemical Oxygen Demand
Method Number EPA 405.1
Detection Limits 2.0 mg/L

Item No. 0026
Method Name Chemical Oxygen Demand

Method Number EPA 410.1
Detection Limits N/A

Item No. 0027, 0032, 0033, 0034, 0035, 0039
Method Name Anions (Water)
Method Number EPA 300
Extraction Method
Level Standard
Matrix Water
Preservative Cool 4 C
Holding Time 28 Days
Instrument LC
Recommended Container 125 ml HDPE
Units mg/L

Parameter	CAS #	PQL	MDL	PQL	MDL
Chloride	16887-00-6	0.3	0.02		
Nitrate	14797-55-8	0.03	0.001		
Nitrate\Nitrite	E-10128	0.06	0.001		
Nitrite	14797-65-0	0.03	0.001		
Phosphate	14265-44-2	0.15	0.001		
Sulfate	14808-79-8	0.3	0.01		

Item No. 0028
Method Name Color
Method Number EPA 110.2
Detection Limits N/A

Item No. 0029
Method Name Conductivity
Method Number EPA 120.1
Detection Limits 10 umhos/cm

Item No. 0030
Method Name Ammonia
Method Number EPA 350.1/350.2
Detection Limits 0.01 mg/L

Item No. 0031
Method Name Kjeldahl
Method Number EPA 351.1/351.3
Detection Limits 0.01 mg/L

Item No. 0036
Method Name Phosphorus, total
Method Number EPA 365.1
Detection Limits 0.001mg/L

Item No. 0037
Method Name Solids, Total Dissolved (TDS)
Method Number EPA 160.2
Detection Limits 5.0 mg/L

Item No. 0038
Method Name Solids, Total Suspended (TSS)
Method Number EPA 160.1
Detection Limits 5.0 mg/L

Item No. 0040
Method Name Sulfide (colorimetric-low level)
Method Number EPA 376.2
Detection Limits 0.05 mg/L

Item No. 0041
Method Name Turbidity
Method Number EPA 180.1
Detection Limits 0.1 NTU

Item No. 0042
Method Name E.Coli
Method Number SM 9222
Detection Limits Counts/100ml

Item No. 0043
Method Name Fecal Coliform (Membrane Filter)
Method Number SM 9222 D
Detection Limits Counts/100ml

Item No. 0044
Method Name Iron Bacteria
Method Number SM 9240 B

Detection Limits **N/A**

Item No. **0045**
Method Name **Sulfur Bacteria**
Method Number **SM 9240 B**
Detection Limits **N/A**

Item No. **0046**
Method Name **Emulation of iron or sulfur bacteria**
Method Number **SM 9240 D**
Detection Limits **N/A**

Item No. **0047**
Method Name **Hardness as CaCO₃**
Method Number **EPA 130.2**
Detection Limits **0.1 mg/L**

Item No. **0048**
Method Name **Other tests that may be required**
Method Number **Various**
Detection Limits **To be Determined**

WAGE DETERMINATION NO: 94-2441 REV (20) AREA: OR, PORTLAND

WAGE DETERMINATION NO: 94-2441 REV (20) AREA: OR, PORTLAND

REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
 FOR OFFICIAL USE ONLY BY FEDERAL AGENCIES PARTICIPATING IN MOU WITH DOL
 WASHINGTON D.C. 20210

William W. Gross Division of | Wage Determination No.: 1994-2441
 Director Wage Determinations | Revision No.: 20
 Date Of Last Revision: 05/30/2003

States: Oregon, Washington

Area: Oregon Counties of Clackamas, Clatsop, Columbia, Gilliam, Hood River, Marion, Multnomah, Polk, Sherman, Tillamook, Wasco, Washington, Yamhill

Washington Counties of Clark, Cowlitz, Klickitat, Pacific, Skamania, Wahkiakum

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	9.02
01012 - Accounting Clerk II	11.04
01013 - Accounting Clerk III	13.12
01014 - Accounting Clerk IV	15.79
01030 - Court Reporter	14.84
01050 - Dispatcher, Motor Vehicle	14.84
01060 - Document Preparation Clerk	11.76
01070 - Messenger (Courier)	8.95
01090 - Duplicating Machine Operator	11.40
01110 - Film/Tape Librarian	11.96
01115 - General Clerk I	7.48
01116 - General Clerk II	8.81
01117 - General Clerk III	11.30
01118 - General Clerk IV	13.26
01120 - Housing Referral Assistant	15.65
01131 - Key Entry Operator I	10.33
01132 - Key Entry Operator II	12.73
01191 - Order Clerk I	10.97
01192 - Order Clerk II	13.66
01261 - Personnel Assistant (Employment) I	10.74
01262 - Personnel Assistant (Employment) II	12.35
01263 - Personnel Assistant (Employment) III	14.81
01264 - Personnel Assistant (Employment) IV	16.34
01270 - Production Control Clerk	17.13
01290 - Rental Clerk	12.05
01300 - Scheduler, Maintenance	13.00
01311 - Secretary I	12.22
01312 - Secretary II	14.64
01313 - Secretary III	15.36
01314 - Secretary IV	18.25
01315 - Secretary V	20.00
01320 - Service Order Dispatcher	13.00
01341 - Stenographer I	11.40

01342 - Stenographer II	13.00
01400 - Supply Technician	18.60
01420 - Survey Worker (Interviewer)	13.06
01460 - Switchboard Operator-Receptionist	11.40
01510 - Test Examiner	14.64
01520 - Test Proctor	14.64
01531 - Travel Clerk I	10.20
01532 - Travel Clerk II	11.11
01533 - Travel Clerk III	11.96
01611 - Word Processor I	11.40
01612 - Word Processor II	13.00
01613 - Word Processor III	14.84
03000 - Automatic Data Processing Occupations	
03010 - Computer Data Librarian	11.31
03041 - Computer Operator I	11.74
03042 - Computer Operator II	13.57
03043 - Computer Operator III	15.70
03044 - Computer Operator IV	17.42
03045 - Computer Operator V	19.30
03071 - Computer Programmer I (1)	14.90
03072 - Computer Programmer II (1)	17.88
03073 - Computer Programmer III (1)	22.12
03074 - Computer Programmer IV (1)	27.23
03101 - Computer Systems Analyst I (1)	20.79
03102 - Computer Systems Analyst II (1)	25.26
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	12.00
05000 - Automotive Service Occupations	
05005 - Automotive Body Repairer, Fiberglass	17.42
05010 - Automotive Glass Installer	15.85
05040 - Automotive Worker	15.85
05070 - Electrician, Automotive	16.58
05100 - Mobile Equipment Servicer	14.24
05130 - Motor Equipment Metal Mechanic	17.42
05160 - Motor Equipment Metal Worker	15.85
05190 - Motor Vehicle Mechanic	17.16
05220 - Motor Vehicle Mechanic Helper	13.40
05250 - Motor Vehicle Upholstery Worker	15.07
05280 - Motor Vehicle Wrecker	15.85
05310 - Painter, Automotive	16.58
05340 - Radiator Repair Specialist	15.85
05370 - Tire Repairer	13.76
05400 - Transmission Repair Specialist	17.42
07000 - Food Preparation and Service Occupations	
(not set) - Food Service Worker	8.47
07010 - Baker	12.43
07041 - Cook I	10.31
07042 - Cook II	11.47
07070 - Dishwasher	7.91
07130 - Meat Cutter	14.51
07250 - Waiter/Waitress	8.52
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	16.58
09040 - Furniture Handler	11.77
09070 - Furniture Refinisher	16.58
09100 - Furniture Refinisher Helper	13.40

09110 - Furniture Repairer, Minor	15.07
09130 - Upholsterer	16.58
11030 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	9.18
11060 - Elevator Operator	9.07
11090 - Gardener	11.37
11121 - House Keeping Aid I	8.43
11122 - House Keeping Aid II	9.10
11150 - Janitor	9.10
11210 - Laborer, Grounds Maintenance	9.46
11240 - Maid or Houseman	8.72
11270 - Pest Controller	12.00
11300 - Refuse Collector	9.10
11330 - Tractor Operator	10.78
11360 - Window Cleaner	9.80
12000 - Health Occupations	
12020 - Dental Assistant	14.14
12040 - Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	13.68
12071 - Licensed Practical Nurse I	13.73
12072 - Licensed Practical Nurse II	15.40
12073 - Licensed Practical Nurse III	17.23
12100 - Medical Assistant	12.29
12130 - Medical Laboratory Technician	12.63
12160 - Medical Record Clerk	11.74
12190 - Medical Record Technician	14.14
12221 - Nursing Assistant I	7.98
12222 - Nursing Assistant II	8.97
12223 - Nursing Assistant III	9.78
12224 - Nursing Assistant IV	10.67
12250 - Pharmacy Technician	12.45
12280 - Phlebotomist	12.10
12311 - Registered Nurse I	15.21
12312 - Registered Nurse II	23.18
12313 - Registered Nurse II, Specialist	23.18
12314 - Registered Nurse III	27.72
12315 - Registered Nurse III, Anesthetist	27.72
12316 - Registered Nurse IV	28.18
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	16.91
13011 - Exhibits Specialist I	14.29
13012 - Exhibits Specialist II	17.69
13013 - Exhibits Specialist III	20.06
13041 - Illustrator I	15.26
13042 - Illustrator II	18.89
13043 - Illustrator III	21.42
13047 - Librarian	21.65
13050 - Library Technician	12.65
13071 - Photographer I	12.94
13072 - Photographer II	13.87
13073 - Photographer III	17.17
13074 - Photographer IV	20.92
13075 - Photographer V	25.30
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	8.18
15030 - Counter Attendant	8.18
15040 - Dry Cleaner	9.79

15070 - Finisher, Flatwork, Machine	8.18
15090 - Presser, Hand	8.18
15100 - Presser, Machine, Drycleaning	8.18
15130 - Presser, Machine, Shirts	8.18
15160 - Presser, Machine, Wearing Apparel, Laundry	8.18
15190 - Sewing Machine Operator	10.46
15220 - Tailor	11.23
15250 - Washer, Machine	8.88
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	16.58
19040 - Tool and Die Maker	22.00
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	15.66
21020 - Material Coordinator	16.58
21030 - Material Expediter	16.58
21040 - Material Handling Laborer	12.22
21050 - Order Filler	11.94
21071 - Forklift Operator	14.15
21080 - Production Line Worker (Food Processing)	14.51
21100 - Shipping/Receiving Clerk	13.40
21130 - Shipping Packer	13.43
21140 - Store Worker I	10.30
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	13.17
21210 - Tools and Parts Attendant	14.51
21400 - Warehouse Specialist	14.51
23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aircraft Mechanic	18.27
23040 - Aircraft Mechanic Helper	14.51
23050 - Aircraft Quality Control Inspector	20.09
23060 - Aircraft Servicer	16.58
23070 - Aircraft Worker	17.44
23100 - Appliance Mechanic	17.42
23120 - Bicycle Repairer	13.76
23125 - Cable Splicer	22.03
23130 - Carpenter, Maintenance	18.60
23140 - Carpet Layer	17.44
23160 - Electrician, Maintenance	23.60
23181 - Electronics Technician, Maintenance I	13.33
23182 - Electronics Technician, Maintenance II	19.94
23183 - Electronics Technician, Maintenance III	22.98
23260 - Fabric Worker	15.12
23290 - Fire Alarm System Mechanic	19.16
23310 - Fire Extinguisher Repairer	15.59
23340 - Fuel Distribution System Mechanic	19.16
23370 - General Maintenance Worker	15.85
23400 - Heating, Refrigeration and Air Conditioning Mechanic	17.45
23430 - Heavy Equipment Mechanic	18.86
23440 - Heavy Equipment Operator	19.34
23460 - Instrument Mechanic	19.34
23470 - Laborer	10.12
23500 - Locksmith	16.58
23530 - Machinery Maintenance Mechanic	18.23
23550 - Machinist, Maintenance	20.34
23580 - Maintenance Trades Helper	13.40
23640 - Millwright	19.16
23700 - Office Appliance Repairer	18.24

23740 - Painter, Aircraft	17.39
23760 - Painter, Maintenance	16.58
23790 - Pipefitter, Maintenance	21.36
23800 - Plumber, Maintenance	19.07
23820 - Pneudraulic Systems Mechanic	19.16
23850 - Rigger	19.16
23870 - Scale Mechanic	17.44
23890 - Sheet-Metal Worker, Maintenance	17.81
23910 - Small Engine Mechanic	15.85
23930 - Telecommunication Mechanic I	18.65
23931 - Telecommunication Mechanic II	19.55
23950 - Telephone Lineman	19.16
23960 - Welder, Combination, Maintenance	17.42
23965 - Well Driller	18.59
23970 - Woodcraft Worker	20.02
23980 - Woodworker	14.24
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	9.95
24580 - Child Care Center Clerk	13.04
24600 - Chore Aid	8.69
24630 - Homemaker	14.74
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	19.33
25040 - Sewage Plant Operator	17.51
25070 - Stationary Engineer	19.33
25190 - Ventilation Equipment Tender	14.51
25210 - Water Treatment Plant Operator	18.33
27000 - Protective Service Occupations	
(not set) - Police Officer	21.06
27004 - Alarm Monitor	14.91
27006 - Corrections Officer	19.51
27010 - Court Security Officer	19.84
27040 - Detention Officer	19.84
27070 - Firefighter	20.30
27101 - Guard I	10.58
27102 - Guard II	13.92
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	17.75
28020 - Hatch Tender	17.75
28030 - Line Handler	17.75
28040 - Stevedore I	16.16
28050 - Stevedore II	17.64
29000 - Technical Occupations	
21150 - Graphic Artist	18.88
29010 - Air Traffic Control Specialist, Center (2)	29.00
29011 - Air Traffic Control Specialist, Station (2)	19.99
29012 - Air Traffic Control Specialist, Terminal (2)	22.02
29023 - Archeological Technician I	12.80
29024 - Archeological Technician II	14.30
29025 - Archeological Technician III	17.69
29030 - Cartographic Technician	18.61
29035 - Computer Based Training (CBT) Specialist/ Instructor	20.79
29040 - Civil Engineering Technician	18.70
29061 - Drafter I	11.59
29062 - Drafter II	13.33
29063 - Drafter III	14.29

29064 - Drafter IV	17.69
29081 - Engineering Technician I	12.53
29082 - Engineering Technician II	14.08
29083 - Engineering Technician III	16.67
29084 - Engineering Technician IV	20.03
29085 - Engineering Technician V	25.70
29086 - Engineering Technician VI	28.56
29090 - Environmental Technician	16.80
29100 - Flight Simulator/Instructor (Pilot)	25.23
29160 - Instructor	20.77
29210 - Laboratory Technician	15.90
29240 - Mathematical Technician	18.87
29361 - Paralegal/Legal Assistant I	14.69
29362 - Paralegal/Legal Assistant II	20.92
29363 - Paralegal/Legal Assistant III	25.59
29364 - Paralegal/Legal Assistant IV	30.97
29390 - Photooptics Technician	18.87
29480 - Technical Writer	23.25
29491 - Unexploded Ordnance (UXO) Technician I	18.43
29492 - Unexploded Ordnance (UXO) Technician II	22.30
29493 - Unexploded Ordnance (UXO) Technician III	26.72
29494 - Unexploded (UXO) Safety Escort	18.43
29495 - Unexploded (UXO) Sweep Personnel	18.43
29620 - Weather Observer, Senior (3)	17.63
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	15.90
29622 - Weather Observer, Upper Air	15.90
31000 - Transportation/ Mobile Equipment Operation Occupations	
31030 - Bus Driver	15.37
31260 - Parking and Lot Attendant	8.65
31290 - Shuttle Bus Driver	11.32
31300 - Taxi Driver	9.68
31361 - Truckdriver, Light Truck	11.32
31362 - Truckdriver, Medium Truck	16.91
31363 - Truckdriver, Heavy Truck	17.67
31364 - Truckdriver, Tractor-Trailer	17.67
99000 - Miscellaneous Occupations	
99020 - Animal Caretaker	9.62
99030 - Cashier	10.02
99041 - Carnival Equipment Operator	9.71
99042 - Carnival Equipment Repairer	10.31
99043 - Carnival Worker	7.91
99050 - Desk Clerk	10.45
99095 - Embalmer	18.43
99300 - Lifeguard	9.68
99310 - Mortician	18.61
99350 - Park Attendant (Aide)	12.16
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	10.59
99500 - Recreation Specialist	14.49
99510 - Recycling Worker	12.29
99610 - Sales Clerk	10.65
99620 - School Crossing Guard (Crosswalk Attendant)	10.01
99630 - Sport Official	9.68
99658 - Survey Party Chief (Chief of Party)	20.22
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	16.33
99660 - Surveying Aide	11.92
99690 - Swimming Pool Operator	14.51

99720 - Vending Machine Attendant	12.29
99730 - Vending Machine Repairer	14.51
99740 - Vending Machine Repairer Helper	12.29

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$2.36 an hour or \$94.40 a week or \$409.07 a month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3) WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

**** UNIFORM ALLOWANCE ****

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to

this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C) (vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b) (2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper. When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the

wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

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